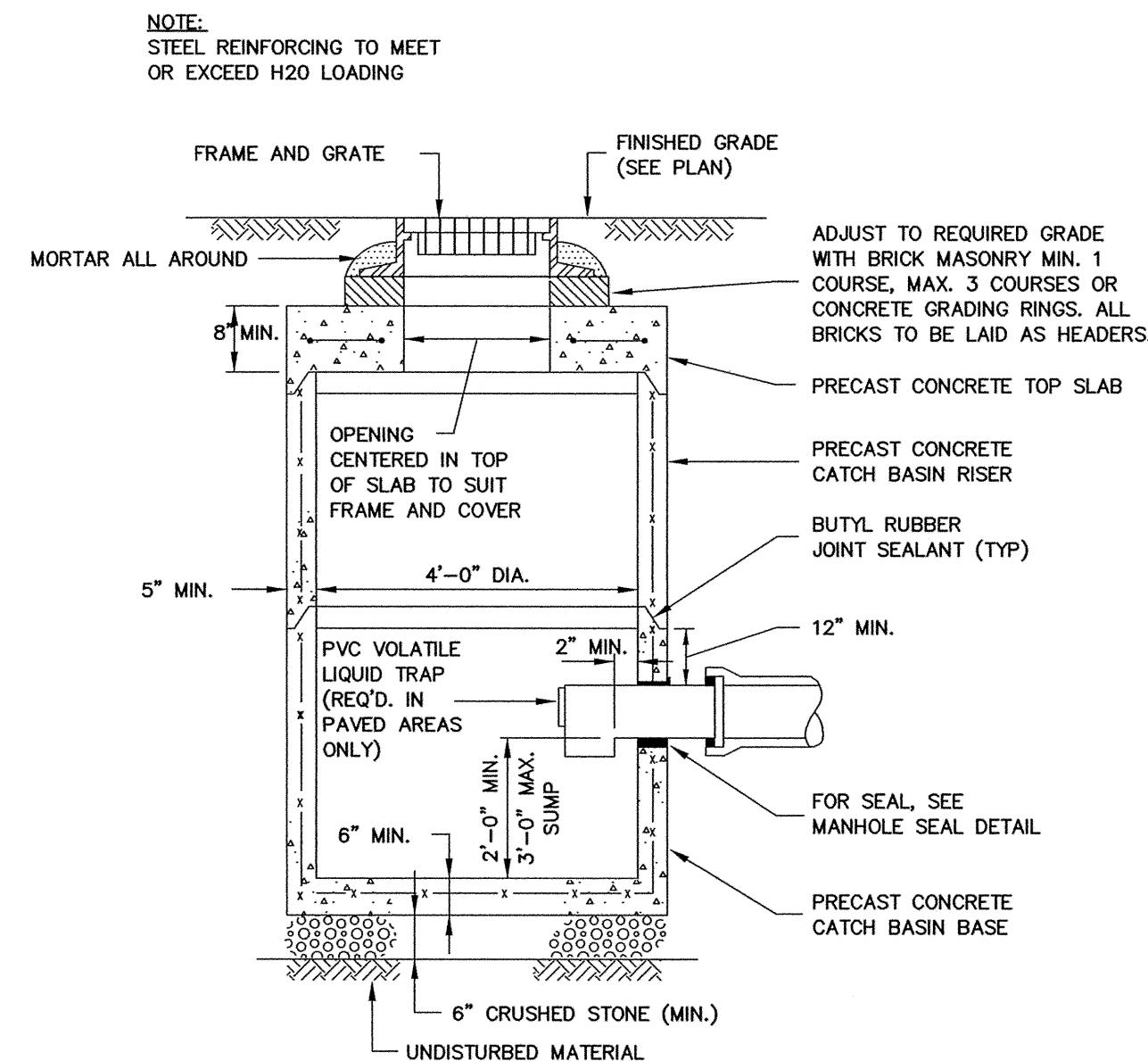


- NOTES:**
1. LOCATE THE CUT LINES AS CLOSE TO THE CURB LINE AS POSSIBLE.
 2. UNLESS DIRECTED BY THE ENGINEER, ALL EXCAVATION RELATED TO THE ROOT SYSTEM AND STUMP REMOVAL SHALL NOT BE OUTSIDE THE SIDEWALK LIMITS.
 3. ALL ROOTS WITHIN 24 INCH DEPTH AND THE SIDEWALK LIMITS SHALL BE REMOVED.

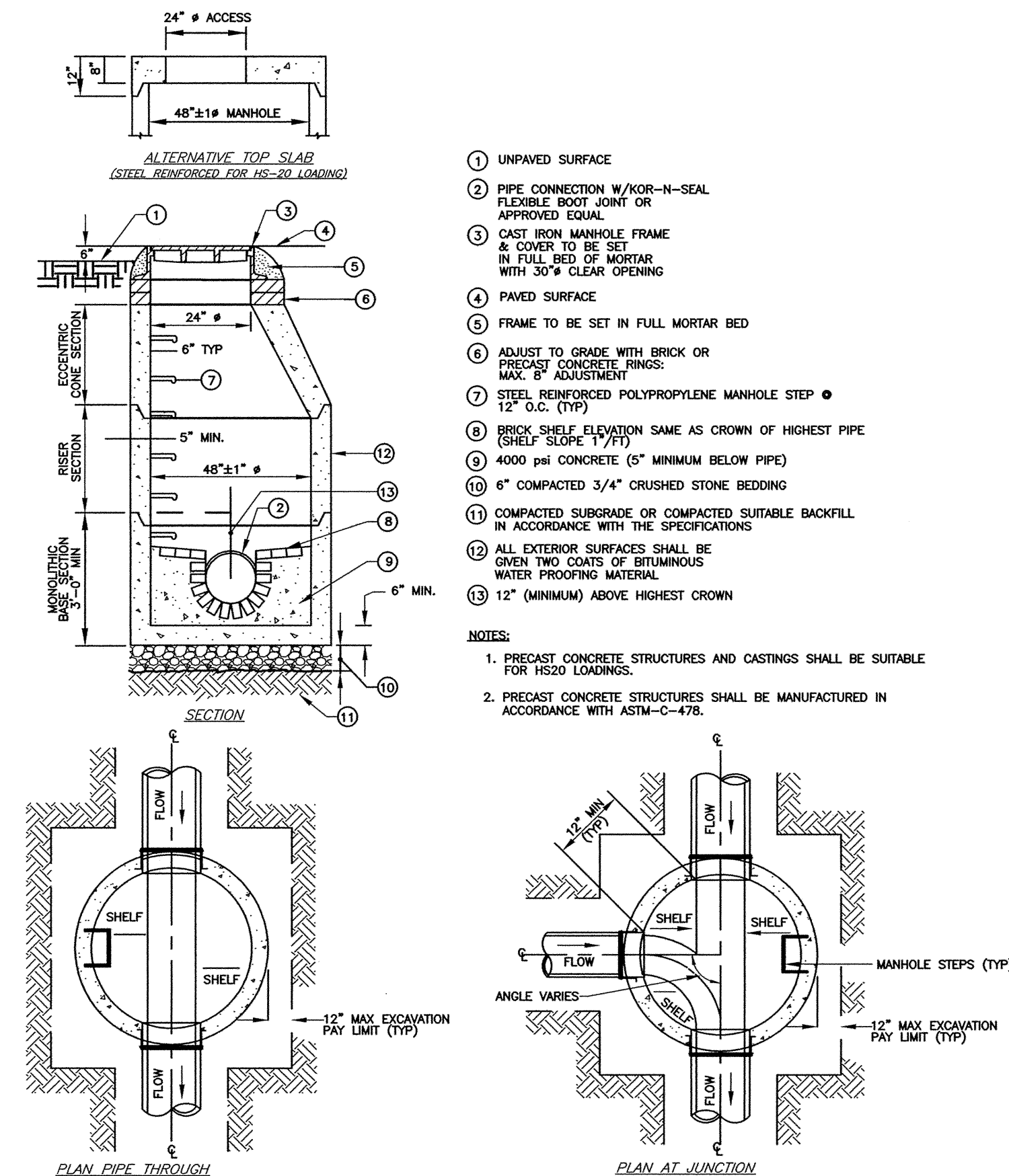
TREE ROOT SYSTEM REMOVAL DETAIL

NOT TO SCALE
SOURCE: CITY OF QUINCY



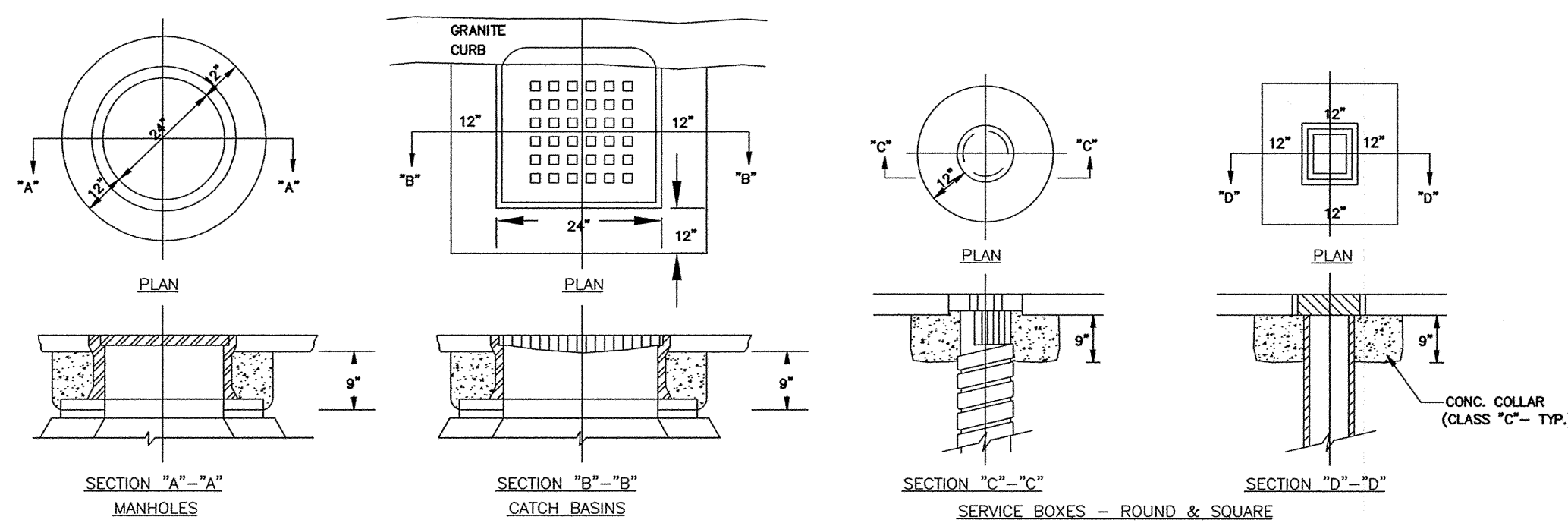
PRECAST CATCH BASIN DETAIL

NOT TO SCALE



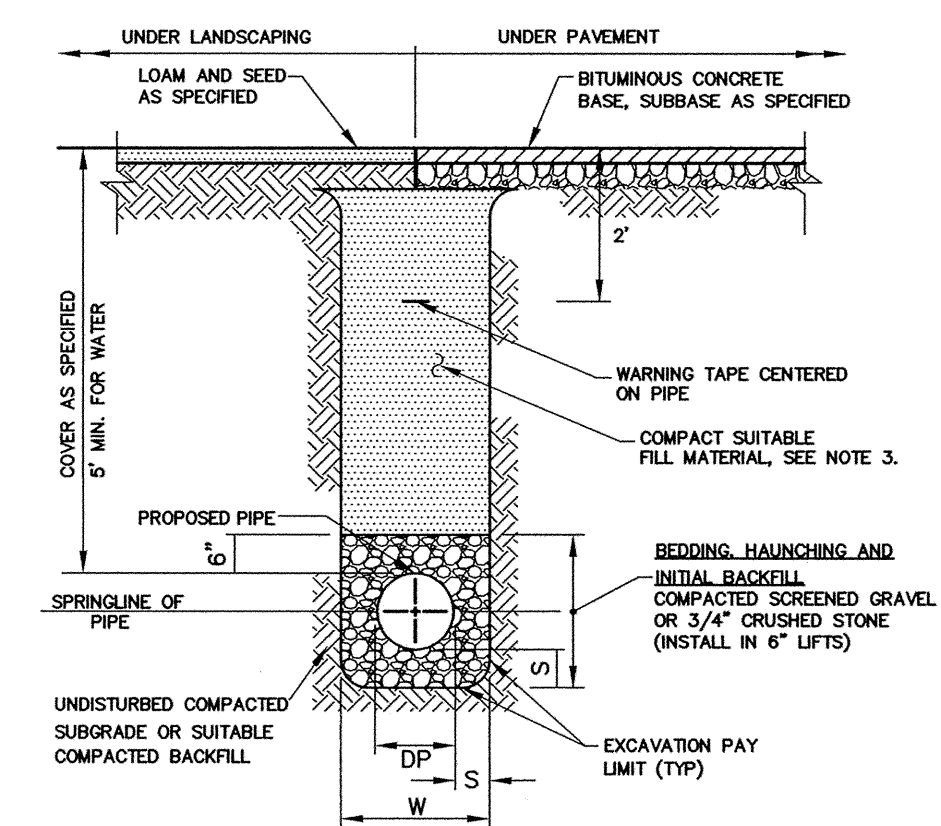
TYPICAL PRECAST MANHOLE

NOT TO SCALE



CONCRETE COLLARS

NOT TO SCALE
SOURCE: CITY OF QUINCY



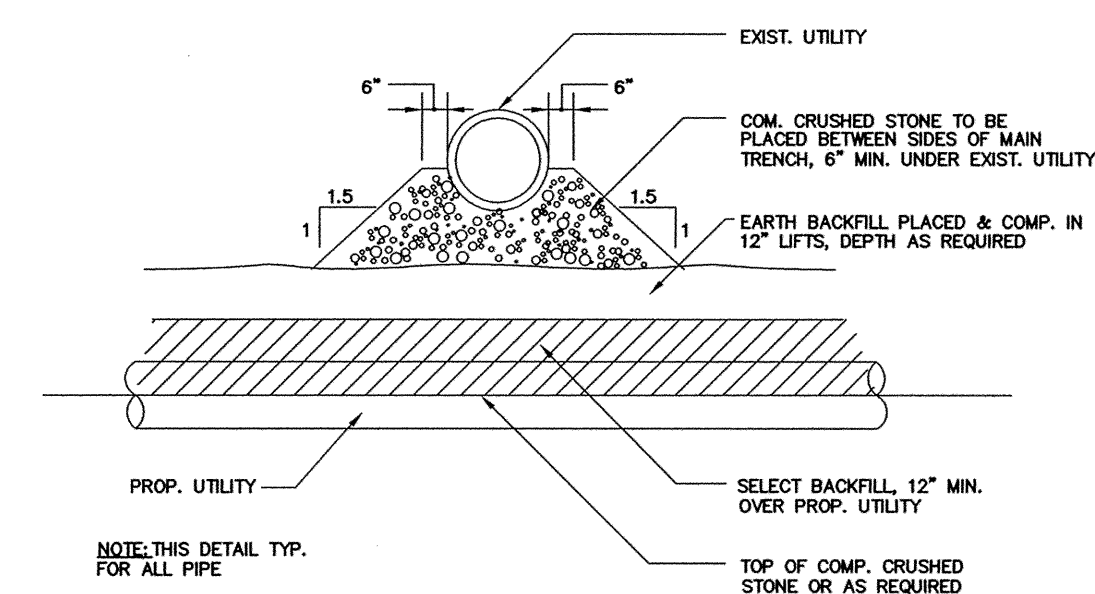
- NOTES:**
1. BEDDING, HAUNCHING AND BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS.
 2. NON-WOVEN GEOTEXTILE SHALL BE INSTALLED AGAINST THE TRENCH WALLS IN THE BEDDING AND HAUNCHING ZONES WHEN FINE SANDS, SILT, CLAY OR ORGANIC MATERIALS ARE ENCOUNTERED AT THE TRENCH BOTTOM.
 3. SUITABLE BACKFILL IN TRENCHES UNDER ROADWAY IN COLD PLANE AREAS SHALL BE CONTROLLED DENSITY FILL TYPE 2E (AA-08.0). BACKFILL MATERIAL SHALL BE INCIDENTAL TO THE INSTALLATION OF THE RESPECTIVE PIPE & NOT MEASURED AS A SEPARATE PAY ITEM.

TYPICAL TRENCH DETAIL

NOT TO SCALE

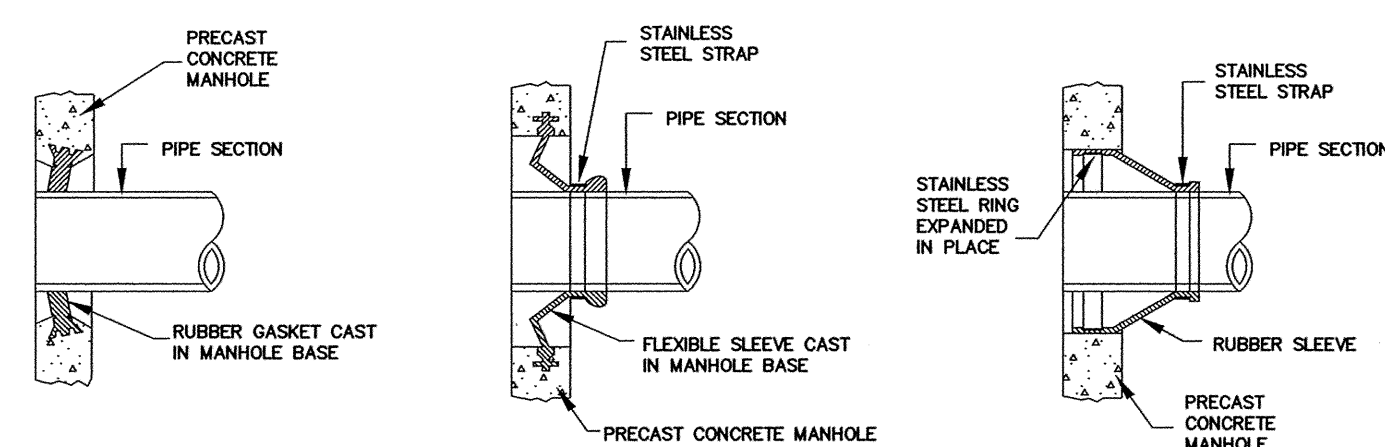
DEPTH TO INVERT	DIAMETER OF PIPE (D _P)	MAXIMUM TRENCH WIDTH BELOW LINE OF NARROW TRENCH LIMIT (SHEETED OR UNSHEETED) (W)	MINIMUM CLEARANCE (S)
0-12"	TO 18"	5'	6"
0-12"	21"-24"	5'	7-1/2"
OVER 12'	TO 18"	7'	6"
OVER 12'	21"-24"	7'	7-1/2"
OVER 12'	24"-36"	7'	7-1/2"

TABLE A



UTILITY CROSSING DETAIL

NOT TO SCALE
SOURCE: CITY OF QUINCY



MANHOLE SEAL DETAILS

NOT TO SCALE
SOURCE: CITY OF QUINCY